



17224 U.S. PTO

UTILITY PATENT APPLICATION TRANSMITTAL (Only for new nonprovisional applications under 37 CFR 1.53(b))	Attorney Docket No. 044158/273011
	First Inventor Tuomanen
	Title A POLYPEPTIDE COMPRISING THE AMINO ACID OF AN N-TERMINAL CHOLINE BINDING PROTEIN A TRUNCATE, VACCINE DERIVED THEREFROM AND USES THEREOF
	Express Mail Label No. EL868642415US

22390 U.S. PTO
10/751702

ADDRESS TO: MAIL STOP PATENT APPLICATION
COMMISSIONER FOR PATENTS
P.O. BOX 1450
ALEXANDRIA, VA 22313-1450

Transmitted herewith for filing in the United States Patent Office is a patent application for:

Inventors: Elaine I. Tuomanen
Theresa M. Wizemann
H.R. Masure
Leslie S. Johnson
Scott Koenig

Assignee of this invention is St. Jude Children's Research Hospital and Medimmune, Inc.

1. ☒ The Filing Fee has been calculated as shown below:
2. ☐ Applicant claims Small Entity Status. See 37 CFR 1.27.

No. Filed		No. Extra		Small Entity		Large Entity	
				Rate	Fee 0	Rate	Fee 1
BASIC FEE				\$ 0		\$ 770	
TOTAL CLAIMS:		37 - 20 =	17	X 9 = \$ 0		x 18 = \$ 306	
INDEP CLAIMS:		3 - 3 =	0	X 43 = \$ 0		x 86 = \$ 0	
[] MULTIPLE DEPENDENT CLAIMS PRESENTED				+145 = \$		+290 = \$	
*If the difference in Column 1 is less than zero, enter "0" in Column 2.				TOTAL	\$	TOTAL	\$ 1076

The Commissioner is hereby authorized to credit overpayments or charge the following fees to Deposit Acct. No.

- a. ☐ Fees required under 37 CFR 1.16 (National filing fees).
- b. ☐ Fees required under 37 CFR 1.17 (National application processing fees) including any extension of time fees under 37 CFR § 1.136(a) that are required for consideration of papers filed during prosecution.
- ☒ A check in the amount of \$1076.00 for the filing fee is enclosed.
- ☐ The above filing fee will be paid along with Applicant(s) Response to the Notice to File Missing Parts.
3. ☒ Specification; Total Pages 76
4. ☒ 8 Sheets of Drawing(s) (35 USC 113)
5. ☒ Declaration and Power of Attorney; [Total Pages 7]
 - a. ☐ Newly executed (original or copy)
 - b. ☒ Copy from a prior application (37 CFR 1.63(d))
(for continuation/divisional with Box 18 completed)
 - i. ☐ DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) & 1.33(b).

6. ☒ Application Data Sheet. See 37 CFR 1.76
7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
 - a. ☐ Computer Readable Copy (CRF)
 - b. ☒ Request for Transfer of Computer Readable Form of Sequence Listing under 37 CFR § 1.821(e) and MPEP 2422.05 (must be compliant with new rules)
 - c. ☒ Specification Sequence Listing on:
 - i. ☐ CD-ROM or CD-R (2 copies); or
 - ii. ☒ Paper (41 Pages)
 - d. ☒ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s) (including a check for the \$40.00 fee)
10. ☒ 37 CFR 3.73(b) Statement (*when there is an assignee*); ☒ Power of Attorney (Copy)
11. ☐ English Translation Document (*if applicable*)
12. ☒ Information Disclosure Statement (IDS)/PTO-1449; _Copies of IDS Citations
13. ☒ Official Communication to Examiner (4 Pages)
14. ☒ Return Receipt Postcard (MPEP 503) (*Should be specifically itemized*)
15. ☐ Certified Copy of Priority Document(s) (*if foreign priority is claimed*)
☐ Foreign Priority is claimed as Application No. , filed
16. ☐ Nonpublication Request under 35 U.S.C. 122(b)(2)(B)(i).
 Applicant **must** attach form PTO/SB35 or its equivalent.
17. ☐ Request for Early Publication Under 37 CFR § 1.219. Fee of \$300.00 is enclosed.
18. **If a CONTINUING APPLICATION, check appropriate box and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:**
☐ Continuation ☒ Divisional ☐ Continuation in Part (CIP)

of prior Application No: 09/056,019; Filed 04/07/98

Prior Application Information: Examiner Group/Art Unit:

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. **CORRESPONDENCE ADDRESS** **CUSTOMER NUMBER 29312**

Signature: Kelly J. Williamson

Attorney/Agent of Record: Kelly J. Williamson

Attorney/Agent Registration No. 47,179

Alston & Bird LLP

Bank of America Plaza

101 South Tryon Street, Suite 4000

Charlotte, NC 28280-4000

Tel Raleigh Office (919) 862-2200

Fax Raleigh Office (919) 862-2260

"Express Mail" mailing label number EL868642415US

Date of Deposit January 5, 2004

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to:

Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Pamela Lockley

Pamela Lockley/RTA01/2147995v1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: To Be Assigned Confirmation No.: To Be Assigned
Applicant(s): Tuomanen *et al.*
Filed: Concurrently Herewith
Art Unit: To Be Assigned
Examiner: M. Allen
Title: A POLYPEPTIDE COMPRISING THE AMINO ACID OF AN N-TERMINAL
CHOLINE BINDING PROTEIN A TRUNCATE, VACCINE DERIVED
THEREFROM AND USES THEREOF

Docket No.: 044158/207989 (5853-2)
Customer No.: 29312

Mail Stop Patent Application
Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Official Communication to Examiner

Sir:

As required under 37 CFR 1.607(c), Applicants hereby notify the Examiner that some of claims 1-37 of the divisional application filed herewith correspond to claims 1-13 of U.S. Patent No. 6,503,511, which issued on January 7, 2003, and claims the benefit of U.S. Provisional Applications 60/085,743 filed May 15, 1998 and 60/080,878 filed April 7, 1998. The priority document of the 6,503,511 patent (U.S. 60/080,878) is identical to the specification of the present application. The requirements of 35 U.S.C. §135(b) have been satisfied.

The divisional application of U.S. Application No. 09/056,019 filed concurrently herewith contains claims 1-37.

Support for claims 1 to 37 can be found throughout the specification.

Support for "a vaccine for treating or protecting against pneumococcal infection" as recited in claims 1, 16, and 31 can be found, for example, on page 39, lines 20-34 of the specification.

Support for a "polypeptide in a pharmaceutically acceptable carrier" as recited in claims 1, 16, and 31 can be found, for example, on page 37, lines 25-27 of the specification.

Support for a "variant of SEQ ID NO: 4" as recited in claim 1 can be found, for example, on page 13, lines 5-13 of the specification.

Support for "at least 1 to 15 amino acid substitutions" as recited in claims 1, 16, and 31 can be found, for example, on page 13, lines 5-31 and page 14, lines 1-12 of the specification.

Support for "polypeptide does not bind choline" as recited in claims 1, 16, and 31 can be found, for example, on page 20, lines 18-20 of the specification.

Support for "amino acids 331 to 339, 355 to 365, 367 to 374, 379 to 389 and 409 to 427 of SEQ ID NO: 40" as recited in claims 1, 8, 16, 24, and 31 can be found, for example, on page 37, lines 19-27 of the specification.

Support for a "polypeptide exhibits a tertiary structure of a native, full-length CbpA polypeptide" as recited in claims 1, 16, and 31 can be found, for example on page 6, lines 20-29 of the specification.

Support for "the polypeptide content of said vaccine being in an amount effective for treating or protecting against pneumococcal infection" as recited in claims 1, 16, and 31 can be found, for example, on page 37, lines 9-13 of the specification.

Support for "said polypeptide interacts with an antibody, said antibody is capable of interacting with domain C of a full-length CbpA polypeptide" are recited in claims 2, 9, 17, 25, and 32 can be found, for example, on page 64, lines 6-31 and page 65, lines 1-25 of the specification.

Support for "said polypeptide comprises a C domain identical to a polypeptide that is a competitive inhibitor of bacterial adhesion of pneumococcal" as recited in claims 3, 10, 18, 26, and 33 can be found, for example, on page 1, lines 13-14, page 39, lines 21-24 and page 40, lines 1-5 of the specification.

Support for "said amino acid sequence is identical to the amino acid sequence of an N-terminal choline binding protein" as recited in claims 4, 11, 19, 27, and 34 can be found, for example, on page 26, lines 30-31 of the specification.

Support for "said vaccine when administered elicits an antibody that protects against pneumococcal infection in said mammal" as recited in claims 5, 12, 20, 28, and 31 can be found, for example, on page 38, lines 25-34 and page 1-5 of the specification.

Support for "said mammal is a human" as recited in claims 6, 13, 21, 29, and 36, can be found, for example, on page 45, line 17 of the specification.

Support for "an adjuvant" as recited in claims 7, 14, 22, 30, and 37 can be found, for example, on page 41, lines 20-31 of the specification.

Support for "a variant of SEQ ID NO: 40" as recited in claim 16 and 31 can be found, for example, on page 13, lines 5-9 of the specification.

Support for "about amino acid 327 to amino acid 433 of SEQ ID NO: 40" as recited in claim 31 can be found, for example, on page 5, lines 5-6 of the specification.


Support for claim 15 can be found, for example, on page 37, lines 17-19 of the specification.

Support for claim 23 can be found, for example, on page 37, lines 19-25 and page 5, lines 5-6.

No new matter has been entered by way of these amendments.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,


Kelly J. Williamson
Patent Agent
Registration No. 47,179

Appl. No.: To be Assigned
Filed: Concurrently Herewith
Page 4

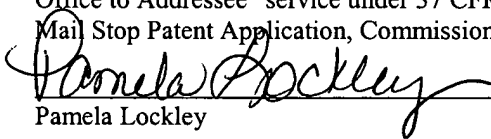
Customer No. 29312
ALSTON & BIRD LLP
Bank of America Plaza
101 South Tryon Street, Suite 4000
Charlotte, NC 28280-4000
Tel Raleigh Office (919) 862-2200
Fax Raleigh Office (919) 862-2260

"Express Mail" mailing label number EL868642415US

Date of Deposit January 5, 2004

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to:

Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450



Pamela Lockley

RTA01/2147154v1